

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for compressing an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, comprising:

selecting a set of N raster lines;

reformatting the image by interleaving the only corresponding pixels of each
of the N raster lines; and

compressing the reformatted interleaved data.

2. (Currently Amended) The method of claim 1, wherein interleaving the only
the corresponding pixels of the N selected raster lines comprises:

selecting a next pixel along the second direction from each of the N selected raster lines;

forming at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and

storing the at least one byte.

3. (Original) The method of claim 1, wherein compressing the reformatted interleaved data compresses using at least one byte oriented compression technique to compress the reformatted interleaved data.

4. (Original) The method of claim 1, wherein the at least one byte oriented compression technique is at least one of LWZ, ZIP and Compress.

5. (Currently Amended) A method for decompressing compressed image data to form a restored image, comprising:

inputting compressed interleaved data;
decompressing the compressed interleaved data; and
un-interleaving the decompressed interleaved data to create raster image data

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for the restored image by selecting at least one next byte of the decompressed interleaved data; and

distributing each bit of the at least one byte to corresponding pixels in N raster lines of the restored image. image, the raster image data defining a plurality of raster lines extending in a final direction, each raster line having a plurality of pixels extending in a second direction.

6. (Canceled)

7. (Currently Amended) An image compression system that compresses an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, the system ~~comprising;~~ comprising:

a binary data reformatter that reformats raster image data of the original image by interleaving only corresponding pixels of the original image; and

a compressor that compresses the interleaved raster image data.

8. (Currently Amended) The image compression system of claim 7 wherein interleaving the only corresponding pixels of the N selected raster lines, the system:
selects a next pixel along the second direction from each of the N selected raster lines;

forms at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and
stores the at least one byte.

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9. (Original) The image compression system of claim 7, wherein the compressor is a byte-oriented compressor.

10. (Original) The image compression system of claim 7, wherein the compressor uses at least one of LWZ, ZIP and Compress.

11. (Currently Amended) An image decompression system that decompresses compressed image data to form a restored image, the system comprising:

a decompressor that decompresses the compressed interleaved data that was reformatted by interleaving only corresponding pixels of the data;

an inverse binary data reformatter that un-interleaves the interleaved data and forms a raster image data of the restored image by selecting at least one next byte of the decompressed interleaved data and distributing each bit of the at least one byte to corresponding pixels in N raster lines of the restored image; and

an output controller that outputs the un-interleaved data to an output device.

12. (Original) The original image decompression system of claim 11, wherein the decompressor is a byte-oriented compressor technique decompressor.

13. (Currently Amended) A method of compressing and decompressing image data, comprising:

reformatting binary image data into reformatted image data by interleaving only corresponding pixels of N selected raster lines;

compressing the reformatted image data;

decompressing the compressed reformatted image data; and

reverse reformatting the decompressed image data into binary image data.

14. (Previously Presented) The method of claim 13, further comprising transmitting the compressed reformatted image data between the compressing and decompressing steps.

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15. (Previously Presented) The method of claim 14, further comprising receiving the compressed reformatted image data between the transmitting and decompressing steps.

16. (Previously Presented) The method of claim 13, further comprising storing the compressed reformatted image data between the compressing and decompressing steps.

17. (Previously Presented) The method of claim 16, further comprising retrieving the compressed reformatted image data between the storing and decompressing steps.

18. (Currently Amended) A method for compressing and decompressing an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, and decompressing compressed image data to form a restored image, comprising:

selecting a set of N raster lines;
reformatting the image by interleaving the only corresponding pixels of each
of the N raster lines;

compressing the reformatted interleaved data;
decompressing the compressed interleaved data; and
un-interleaving the decompressed interleaved data to create raster image data for the restored image, the raster image data defining a plurality of raster lines extending in a final direction, each raster line having a plurality of pixels extending in a second direction.

19. (Previously Presented) The method of claim 18, wherein interleaving the pixels of the N selected raster lines comprises:

selecting a next pixel along the second direction from each of the N selected raster lines;
forming at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and

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storing the at least one byte.

20. (Previously Presented) The method of claim 18, wherein compressing the reformatted interleaved data compresses using at least one byte oriented compression technique to compress the reformatted interleaved data.

21. (Previously Presented) The method of claim 18, wherein the at least one byte oriented compression technique is at least one of LWZ, ZIP and Compress.

22. (Previously Presented) The method of claim 18, wherein un-interleaving the decompressed interleaved data to the raster image data of the restored image, comprises:

selecting at least one next byte of the decompressed interleaved data; and
distributing each bit of the at least one byte to corresponding pixels in N raster lines of the restored image.

23. (Currently Amended) An image compression and decompression system that compresses an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, and decompresses compressed image data to form a restored image, the system comprising:

a binary data reformatter that reformats raster image data of the original image by interleaving only corresponding pixels of the original image;

a compressor that compresses the interleaved raster image data;

a decompressor that decompresses the compressed interleaved data;

an inverse binary data reformatter that un-interleaves the interleaved data and forms a raster image data of the restored image by selecting at least one next byte of the decompressed interleaved data and distributing each bit of the at least one byte to corresponding pixels in N raster lines of the restored image; and

an output controller that outputs the un-interleaved data to an output device.

24. (Previously Presented) The image compression system of claim 23, wherein interleaving the pixels of the N selected raster lines, the system:

selects a next pixel along the second direction from each of the N selected raster lines;

forms at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and

stores the at least one byte.

25. (Previously Presented) The image compression system of claim 23, wherein the compressor is a byte-oriented compressor.

26. (Previously Presented) The image compression system of claim 23, wherein the compressor uses at least one of LWZ, ZIP and Compress.

27. (Previously Presented) The original image decompression system of claim 23, wherein the decompressor is a byte-oriented compressor technique decompressor.